

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.- 66. (Cancelled).

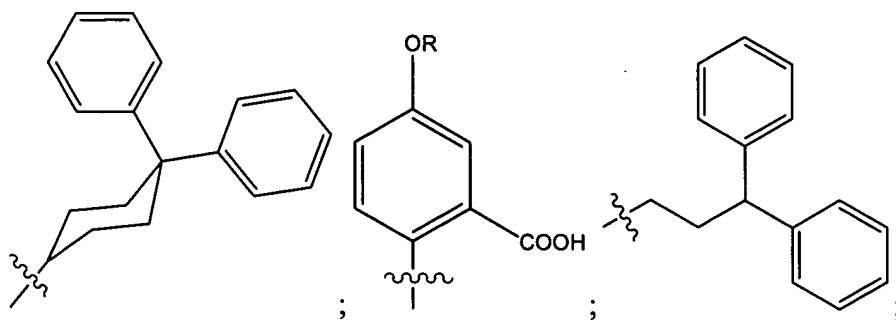
67. (New) A composition of matter having the following formula:

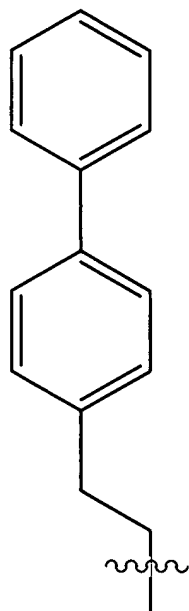
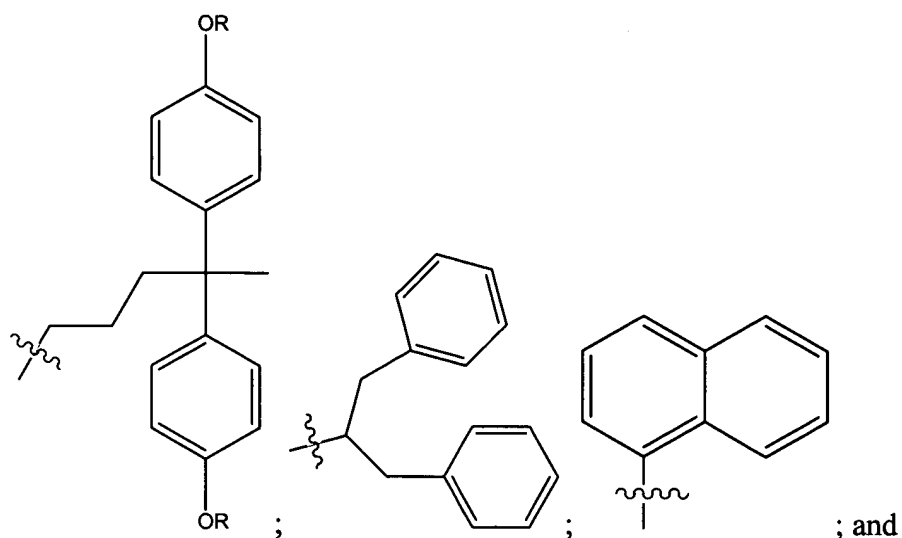
IEM-PBM-MS-MM,

wherein said IEM comprises a complex between:

- (1) a chelating agent selected from the group consisting of DTPA, DOTA, DTPA-BMA, and HP-DO3A, and
- (2) one or more paramagnetic metal ions (M) with atomic numbers 21-29, 42, 44, or 57-83;

wherein said -PBM moiety is selected from the group consisting of:





, wherein at least one aryl ring of each member of the group is substituted with said -MS-MM moiety;

wherein R can be a linear or branched alkyl group having from 1 to 5 carbons, an aryl group, or a cycloalkyl group;

wherein the wavy line signifies the attachment site for the IEM;

wherein said -PBM moiety is conjugated to said IEM via a covalent bond to a methylene carbon of said chelating agent of said IEM;

wherein said MS moiety comprises an amide bond;

wherein said MM moiety is a peptide comprising two or more positively charged amino acids;
and pharmaceutically acceptable salts thereof.

68. (New) The composition of claim 67, wherein said MM moiety is a peptide comprising two or more Arg, Lys, or tm-Lys amino acids, or mixtures thereof.

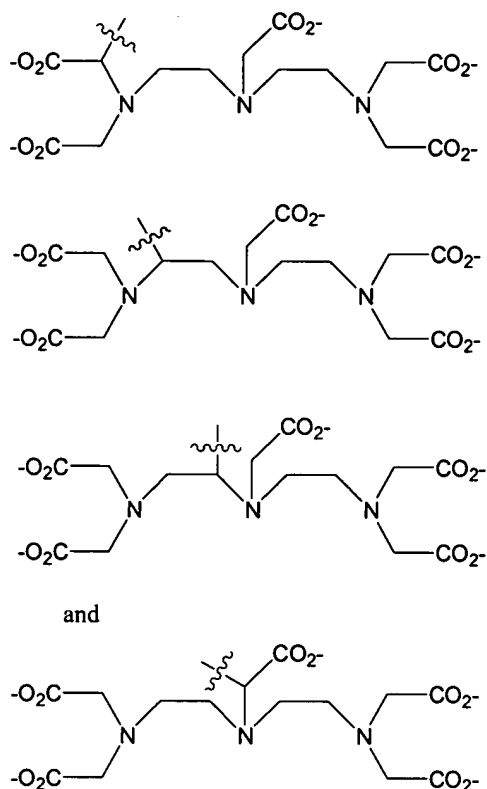
69. (New) The composition of claim 68, wherein said MS moiety comprises a Gly amino acid.

70. (New) The composition of claim 68, wherein said MS moiety comprises an Arg-Glu dipeptide.

71. (New) The composition of claim 68, wherein said MM moiety is tmLys-tmLys.

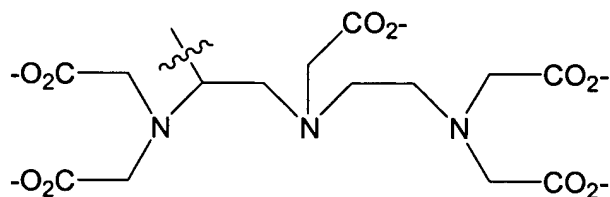
72. (New) The composition of claim 68, wherein said MM moiety is Ile-Arg-Lys.

73. (New) The composition of claim 68, wherein said chelating agent is selected from the group consisting of:



wherein the wavy line signifies the attachment site for the -PBM-MS-MM moiety.

74. (New) The composition of claim 68, wherein said chelating agent is



wherein the wavy line signifies the attachment site for the -PBM-MS-MM moiety.

75. (New) The composition of claim 67, wherein said paramagnetic metal ion is selected from the group consisting of:

- (a) Gd (III),
- (b) Mn (II),

- (c) Fe (III),
- (d) Cu (II),
- (e) Cr (III), and
- (f) Eu (III).

76. (New) The composition of claim 75, wherein said paramagnetic metal ion is Gd(III).

77. (New) The composition of claim 67, wherein the pharmaceutically acceptable salt is an N-methyl-D-glucamine, calcium, or sodium salt.

78. (New) The composition of claim 77, wherein the pharmaceutically acceptable salt is a sodium salt.

79. (New) The composition of claim 69, wherein said MS moiety is a Gly amino acid covalently attached to said PBM via a C=O moiety.

80. (New) The composition of claim 70, wherein said MS moiety is an Arg-Glu dipeptide covalently attached to said PBM via a C=O moiety.

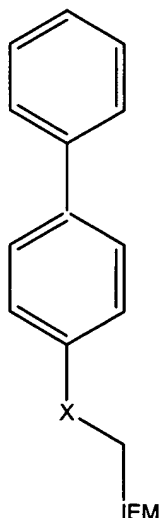
81. (New) A composition of matter having the following formula:

IEM-PBM-MS-MM,

wherein said IEM comprises a complex between:

- (1) a chelating agent selected from the group consisting of DTPA, DOTA, DTPA-BMA, and HP-DO3A, and
- (2) one or more paramagnetic metal ions (M) with atomic numbers 21-29, 42, 44, or 57-83;

said composition having the structure:



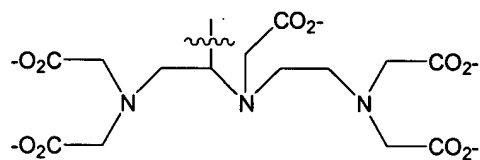
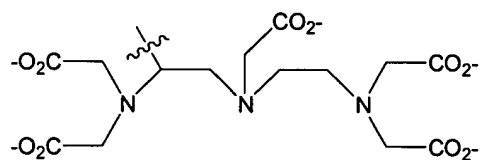
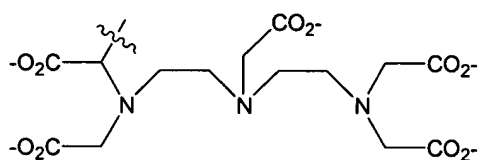
, wherein at least one aryl ring is substituted with said -MS-MM moiety;
wherein X is CH₂, O, or NH;
wherein said MS moiety comprises an amide bond;
wherein said MM moiety is a peptide comprising two or more positively charged amino acids;
and pharmaceutically acceptable salts thereof.

82. (New) The composition of claim 81, wherein said MM moiety is a peptide comprising two or more Arg, Lys, or tm-Lys amino acids, or mixtures thereof.

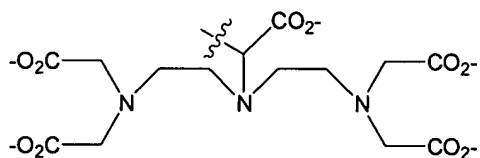
83. (New) The composition of claim 81, wherein said MS moiety comprises a Gly amino acid.

84. (New) The composition of claim 81, wherein said MS moiety comprises an Arg-Glu dipeptide.

85. (New) The composition of claim 82, wherein said MM moiety is tmLys-tmLys.
86. (New) The composition of claim 82, wherein said MM moiety is Ile-Arg-Lys.
87. (New) The composition of claim 81, wherein said chelating agent is selected from the group consisting of:

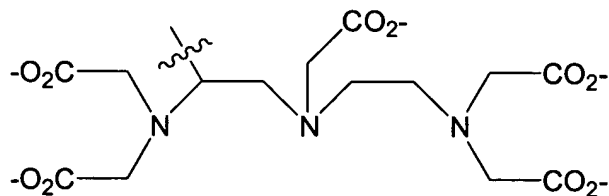


and



wherein the wavy line signifies the attachment site for the -PBM-MS-MM moiety.

88. (New) The composition of claim 87, wherein said chelating agent is



wherein the wavy line signifies the attachment site for the -PBM-MS-MM moiety.

89. (New) The composition of claim 81, wherein said paramagnetic metal ion is selected from the group consisting of:

- (a) Gd (III),
- (b) Mn (II),
- (c) Fe (III),
- (d) Cu (II),
- (e) Cr (III), and
- (f) Eu (III).

90. (New) The composition of claim 89, wherein said paramagnetic metal ion is Gd(III).

91. (New) The composition of claim 81, wherein the pharmaceutically acceptable salt is an N-methyl-D-glucamine, calcium, or sodium salt.

92. (New) The composition of claim 91, wherein said pharmaceutically acceptable salt is a sodium salt.

93. (New) The composition of claim 83, wherein said MS moiety is a Gly amino acid covalently attached to said PBM via a C=O moiety.

94. (New) The composition of claim 84, wherein said MS moiety is an Arg-Glu dipeptide covalently attached to said PBM via a C=O moiety.

95. (New) A method for magnetic resonance imaging, said method comprising

- a) administering to a mammal the composition of matter of claim 67,
- b) allowing the composition of matter to be bioactivated;

c) allowing said bioactivated composition of matter to bind to a protein on the extracellular surface of a tissue or in extracellular fluid surrounding a tissue, said tissue containing a bioactivity to be detected; and

d) subjecting said mammal to magnetic resonance imaging.

96. (New) The compound according to claim 81 having the structure of Prodrug Compound 2 or Prodrug Compound 10 as set forth in the specification.